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AUTHOR Fitz, Don; McLaughlin, Ronald K.
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ABSTRACT

Type A behavior is characterized by extremes of time-urgency, competitive achievement striving, impatience and hostility. Type A persons have distinct patterns of responding to opponents' strategies for lowering hostility. Since minimum retaliation allows the opponent control over one's behavior, the strategy should effectively lower Type A aggression. However, a passive person allows his opponent no control over his behavior. Therefore passivity will not effectively reduce Type A anger. Type B persons, who are not concerned with interpersonal control, should be responsive to both strategies. It was found that: (1) type A males escalated their noise settings more than did Type B's in a competitive task, (2) passivity was the more effective deescalation strategy for Type B's, and (3) type A's showed their greater need for environmental control by reducing more to minimum retaliation and being slower to deescalate and quicker to reescalate to their opponent's passivity. (Author/PJC)

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The Coronary-prone (Type A) Behavior Pattern: Quicker to Anger, Slower to Cool Off

Don Fitz

Ronald K. McLaughlin

University of Missouri-St. Louis

Department of Psychology

8001 Natural Bridge Road

St. Louis, Mo 63121

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Type A behavior has been characterized by extremes of time-urgency, competitive achievement striving, impatience and hostility (1). Carver and Glass (2) have recently suggested that such hostile behavior (1,3,4) occurs only when Type A's are frustrated or provoked and is used as a means of maintaining control over their environment.

Research on interactive aggression (5) requires dyads to compete on a series of reaction time trials. On each trial, both dyad members set the level of punishment (shock or noise) for the other to receive. After each trial, the dyad member with the slower reaction time receives the punishment set by his opponent.

Using such an interactive paradigm, Kimble, Fitz, and Onorad (6) operationalized aggression reduction strategies in terms of the proportionality of an accomplice's noise setting to a participant's previous setting. Research (6,7) has consistently found pacifism (0% counteraggression) and minimum retaliation (10% counteraggression) to be the most effective strategies.

It follows from the Carver and Glass (2) hypothesis that Type A persons may have distinct patterns of responding to opponents' strategies for lowering hostility. Since minimum retaliation allows the opponent control over one's behavior, the strategy should effectively lower Type A aggression. However, a passive person allows his opponent no control over his behavior. Therefore, passivity should not effectively reduce Type A anger. Type B persons, who are presumably not concerned with interpersonal control, should be responsive to both strategies.

The current study was designed to replicate the Carver and Glass (2) finding and examine the hypothesis that passivity (0% counteraggression)

is less effective for reducing Type A aggression.

Method

The form of the Jenkins Activity Survey (JAS, 8) which was revised for use with students by Glass (9) was completed by completed by introductory psychology students at the University of Missouri-St. Louis. Ten Type A and 10 Type B males whose scores fell in the upper or lower quartiles were invited to participate in the study.

Subjects participated in the interactive paradigm described above. Each trial of the competitive reaction time tasks consisted of the following: first, the subject set the seconds of noise (0.0 to 10.0) for his opponent to hear if the opponent was slower to respond; second, when a tricolor light appeared red, blue, or green, the subject hit one of three correspondingly labelled telegraph keys; third, the subject saw the seconds of noise his opponent had set for him and heard the 73 dB noise if he lost. The male opponent was an accomplice of the experimenter. According to a predetermined random schedule, subjects won and lost half of the trials in each of the four phases described below.

The experimental session consisted of 4 pretrials and 25 test trials. For half of the subjects, the accomplice's setting defined the following four phases:

1. four provocative escalation settings ($\underline{M}$=8.625);
2. eight passive withdrawal settings (all at 0.0);
3. four additional provocation settings ($\underline{M}$=8.625);
4. eight minimum retaliation settings (accomplice set 10% of what subject had set on the previous trial).

For the other half of the subjects, the order of phases 2 and 4 was

reversed. The accomplice's last setting was 0.0 for all subjects.

Results

Responses to provocation. As expected, Type A subjects increased their settings from the pretrials (M=4.32) to provocation (phases 1 and 3, M=6.42), $F(1,18)=19.73$, $p<.001$. Type B subjects displayed a small increase (M's=4.87, 5.78), $F(1,18)=3.73$, $p<.10$.

Reduction of aggression. An independent analysis was computed for mean settings during the reduction trials (phases 2 and 4). As predicted, the 2 x 2 analysis of variance revealed an interaction between Type A/B and strategies (0% vs. 10% counteraggression), $F(1,18)=4.27$, $p=.053$. Type A subjects gave higher settings to 0% counteraggression (M=5.35) than to 10% counteraggression (M=4.42). Type B subjects showed the opposite pattern (M's=4.02, 4.43, respectively).

The temporal point at which the difference in setting reduction occurred was determined by performing three way analyses of variance (Type A/B by Strategy by Trial Blocks) on the contiguous Trial Blocks illustrated in Figure 1. As is typically done in interactive aggression research (10,11), single trial fluctuations were reduced by performing these analyses on blocks of two trials. The largest difference occurred immediately after introduction of the reduction strategies. Only Type A subjects who received a pacifist strategy from the accomplice failed to reduce their settings. This resulted in an interaction between Type A/B, strategies (0% vs. 10%), and trial blocks (E3,4 vs. R1,2), $F(1,18)=3.35$, $p<.09$.

Insert Figure 1 about here.

Discussion

The current research broadens support for the hypothesis that Type A persons use aggression to reassert control over their environment. Carver and Glass (2) found that, in a setting where the opponent had no opportunity to respond to a subject's electric shocks, Type A persons gave more intense shocks following provocation. The present study confirms that Type A's also escalate aggression more in an interactive paradigm using auditory punishment. Due to Type A persons' desire for environmental control, their hostility may not be lowered by opponents who use a passive withdrawal strategy.

Recent research (10) has compared men's and women's reactions to passive and proportional counteraggression strategies from either a spouse or an opposite sex stranger. The only condition in which there was an increase in punitive settings toward the end of the trial block was when husbands responded to their passive spouse. Together, these results suggest that Type A males whose wives characteristically respond to disagreement by suddenly becoming passively nonresponsive may experience prolonged anger.

By demonstrating distinct aggression patterns for Type A persons, the current research provides behavioral validation for use of the JAS questionnaire, further supports the interpretation that Type A aggression is an overreaction to provocation (rather than being ubiquitous), and introduces the hypothesis that Type A's are less likely to deescalate aggression when confronting a nonresponsive opponent.

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References

1. Friedman M, Rosenman RH: Association of specific overt behavior pattern with blood and cardiovascular findings. JAMA 169: 1289-1296, 1959.

2. Carver C, Glass D: Coronary-prone behavior pattern and interpersonal aggression. J Pers Soc Psychol 36: 361-366, 1978.

3. Glass DC, Snyder ML, Hollis JF: Time urgency and the type A coronary-prone behavior pattern. J Appl Soc Psychol 4: 125-140, 1974.

4. Dimsdale JE, Hackett TP, Block PC, Hutter AM: Emotional correlates of type A behavior. Psychosom Med 40: 580-583, 1978.

5. Taylor SP: Aggressive behavior and physiological arousal as a function of provocation and the tendency to inhibit aggression. J Pers 35: 297-310, 1967.

6. Kimble CE, Fitz D, Onorad J: Effectiveness of counteraggression strategies in reducing interactive aggression by males. J Pers Soc Psychol 35: 272-278, 1977.

7. Fitz D, Kimble CE, Heidenfelder K: Aggression reduction strategies and monetary incentive fin female dyads. Pers Soc Psychol Bull 4: 353, 1978.

8. Jenkins CD, Zyzanski SJ, Rosenman RH: Progress toward validation of a computer scored test for the type A coronary prone behavior pattern. Psychosom Med 33: 193-202, 1971.

9. Glass DC: Behavior patterns, stress and coronary disease. Hillsdale, N.J., Lawrence Erlbaum Associates, 1977.

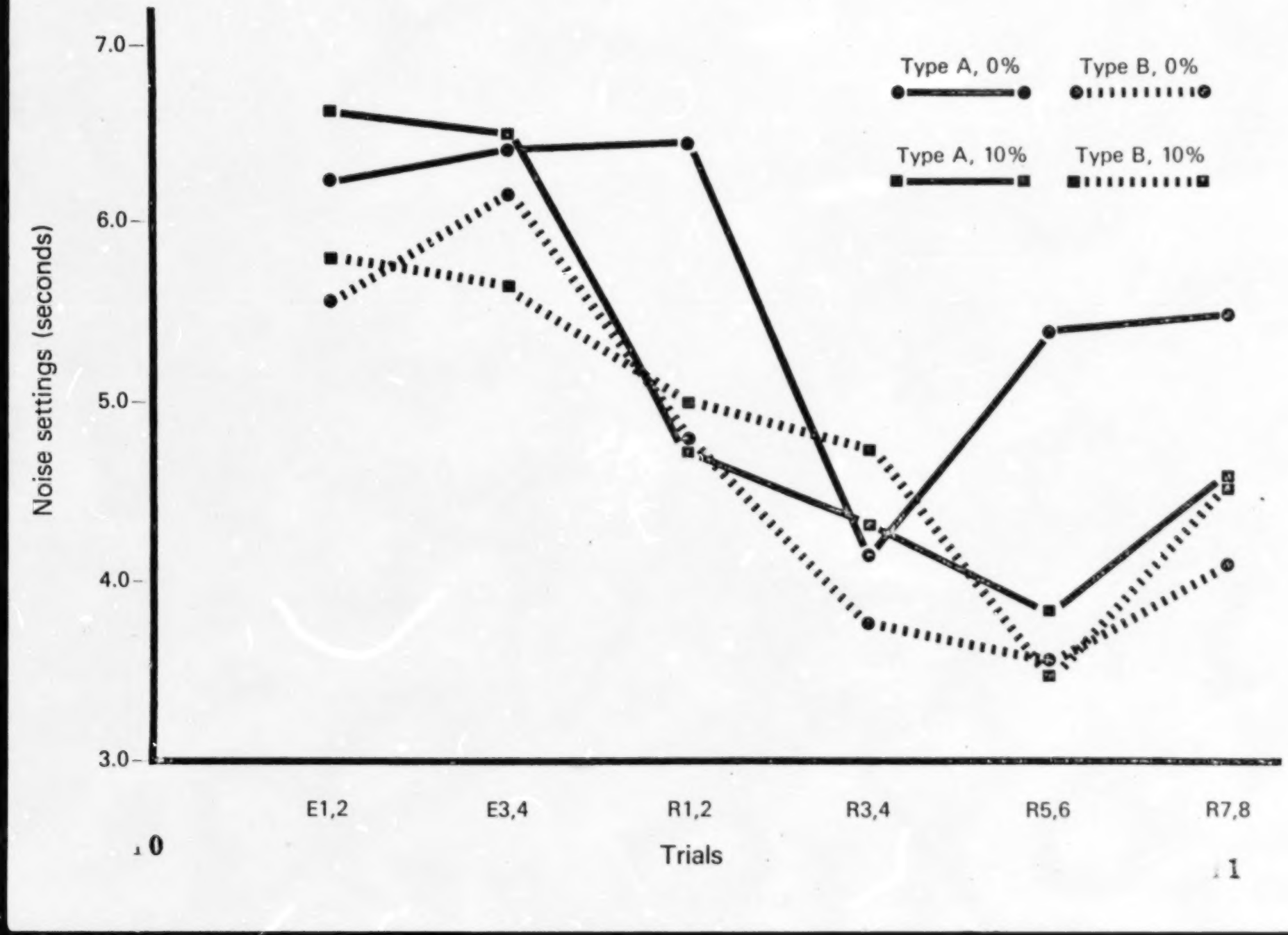
10. Fitz D, Marwit S, Gerstenzang S, Hickman J: Anger between intimates: an experimental study of aggression reduction strategies. Presented to the Midwestern Psychological Association, Chicago, Illinois, May, 1979.

11. Fitz D, Findley M: Anger between men and women: effects of four counteraggression strategies. Presented to the American Psychological Association, New York City, New York, September, 1979.

Figure Caption

Figure 1. Mean noise settings for escalation and reduction trial blocks by Type A/B and counteraggression strategies (0% vs. 10%).

Note. "E1, 2" refers to the sum of escalation Trials 1 and 2 for the appropriate counteraggression strategy. "E3, 4", "R1, 2", "R3, 4", "R5, 6", and "R7, 8" refer to the sums of escalation Trials 3 and 4, and reduction Trials 1 and 2, 3 and 4, 5 and 6, and 7 and 8, respectively.


7.0
6.0
5.0
4.0
3.0
Noise settings (seconds)
Type A, 0%
Type B, 0%
Type A, 10%
Type B, 10%
E1,2
E3,4
R1,2
R3,4
R5,6
R7,8
Trials
0
1